



## JP-10-275852-A

**Country:** Japan  
**Release Date:** 02/99  
**Date:** 10/13/98  
**Assignee:** SEH  
**Field:** WAFER POLISHING  
**Description:** Wafer mounting  
**Note:** The original patent application is in MEMC's Patent Library. A copy is available upon request; contact aroos@memc.com.  
**IMPORTANT NOTE:** To check for English equivalents, see Patent Family and Patent Details in the abstract below.

**Patent:**

**Translation:**

**Abstract:**

JP 10275852 A  
DIALOG(R)File 351:DERWENT WPI  
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012091436 \*\*Image available\*\*  
WPI Acc No: 98-508347/199844  
XRPX Acc No: N98-396427

Sticking semiconductor substrate to support block for polishing - by expanding air bag behind wafer to make it curved and then releasing it to make semiconductor substrate stick to block

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Number of Countries: 025 Number of Patents: 002

**Patent Family:**

Patent No Kind Date Applcat No Kind Date Main IPC Week  
EP 868977 A2 19981007 EP 98302175 A 19980324 B24B-037/04 199844  
B  
JP 10275852 A 19981013 JP 9781642 A 19970331 H01L-021/68 199851

**Priority Applications (No Type Date):** JP 9781642 A 19970331

**Patent Details:**

Patent Kind Lan Pg Filing Notes Application Patent

EP 868977 A2 E 12

Designated States (Regional): AL AT BE CH DE DK ES FI FR GB GR IE  
IT LI

LT LU LV MC MK NL PT RO SE SI

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**Abstract (Basic):** EP 868977 A

The adhesion method for a semiconductor substrate (4) on a support block (11) with an adhesive material involves supporting the semiconductor substrate at its edge in a squeezing condition but also applying a back pressure on the semiconductor substrate with an air bag (5) so that a region of the air bag which corresponds to the central region of the semiconductor substrate is most expanded.

The semiconductor substrate is curved due to the air bag and the central region of the semiconductor substrate is pressed to the support block. After the back pressure is applied the squeezing condition of the semiconductor substrate is released to make the semiconductor

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substrate stick to the support block.

ADVANTAGE - Prevents minute variations in flatness caused by porous suction plate.

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Title Terms: STICK; SEMICONDUCTOR; SUBSTRATE; SUPPORT; BLOCK; POLISH; EXPAND; AIR; BAG; WAFER; CURVE; RELEASE; SEMICONDUCTOR; SUBSTRATE; STICK; BLOCK

Derwent Class: P61; U11

International Patent Class (Main): B24B-037/04; H01L-021/68

International Patent Class (Additional): B24B-041/06; H01L-021/304

File Segment: EPI; EngPI

Manual Codes (EPI/S-X): U11-C06A1; U11-C06A1A

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